SIEMENS

SIREMOBIL

SP

Pre-Installation Checklist

DICOM Bridge

© Siemens AG 2002
The reproduction, transmission or use of this document or its contents is not permitted without express written authority. Offenders will be liable for damages. All rights, including rights created by patent grant or registration of a utility model or design, are reserved.

English
Print No.: SPR2-130.022.01.04.02
Doc. Gen. Date: 01.03
Replaces: SPR2-130.022.01.03.02

Chapter	Page	Revision
0	all	04
1	all	04
2	all	04
3	all	04

Document revision level

The document corresponds to the version/revision level effective at the time of system delivery. Revisions to hardcopy documentation are not automatically distributed.

Please contact your local Siemens office to order current revision levels.

Disclaimer

The installation and service of equipment described herein is to be performed by qualified personnel who are employed by Siemens or one of its affiliates or who are otherwise authorized by Siemens or one of its affiliates to provide such services.

Assemblers and other persons who are not employed by or otherwise directly affiliated with or authorized by Siemens or one of its affiliates are directed to contact one of the local offices of Siemens or one of its affiliates before attempting installation or service procedures.

Page

Document revision level . . . 2
Disclaimer . . . 2

1 General 1-1

Information on the pre-installation checklist . . . 1-1
Contact at the customer site: . . . 1-1
Short description of the DICOM Bridge . . . 1-2
General . . . 1-2
Possible number of receiving stations . . . 1-2
Worklist Station . . . 1-2
Additional information for released printer-receiving stations . . . 1-2
DICOM Conformance statements for DICOM Bridge . . . 1-2
Operating system . . . 1-2

2 Lists 2-1

Receiving stations or printer-receiving stations . . . 2-1
Computer network cabling. . . . 2-1
Cable type and cable length . . . 2-1
Configuration data for network connection . . . 2-2
Computer identification: . . . 2-2
Gateways . . . 2-3
Domain Name Service (DNS) . . . 2-3
WINS Addressing . . . 2-5
Routing . . . 2-5
Configuration of the DICOM Bridge and DICOM receiving stations connected . . . 2-6
DICOM Bridge . . . 2-6
Receiving station 1 . . . 2-6
Receiving station 2 . . . 2-7
Receiving station 3 . . . 2-8
Printer-receiving station . . . 2-9
Worklist Station . . . 2-11

3 Changes to previous version 3 - 1

Information on the pre-installation checklist

In order to perform the installation / start-up of the DICOM Bridge option within the installation time provided, the customer-specific data must be clarified ahead of time and recorded.

The data must be transferred during start-up into the corresponding DICOM Bridge files.

For this purpose, we have provided cross-reference numbers [xx] in the DICOM Bridge installation and start-up instructions as well as in the checklist to assist in locating the respective information. (xx stands for the respective cross-reference number).

When starting up a DICOM connection with a printer receiving station (laser camera...) it would be advantageous that the customer informs a service engineer from the manufacturer of the printer receiving station so that he may be available to assist in optimizing the image quality.

To collect the required data, contact the customer or the customer's system administrator / network administrator.

Contact at the customer site:

Last name	
First name	
Location	
Building	
Telephone	
Internal telephone ext.	
Fax	
Notes	
Notes	

Short description of the DICOM Bridge

General

The DICOM Bridge can be ordered as an option for the SIREMOBIL Compact, SIREMOBIL Iso-C, POWERMOBIL and ARCOSKOP systems. The DICOM Bridge option consists of a personal computer with special hardware for transferring patient images.

The images stored in the internal memory of the system can be transferred via the customer-internal computer network to the existing receiving station.

Possible number of receiving stations

Up to a maximum of four receiving stations can be configured.

The DICOM "SEND" function allows you to communicate with three receiving stations.

You can address a printer-receiving station using the DICOM "BasicPRINT" function.

Worklist Station

A Worklist Station from which a worklist can be inquired and transmitted to the SIREMOBIL e.g. POWERMOBIL or ARCOSKOP can be configured (DICOM Get Worklist function).

Additional information for released printer-receiving stations

Some of the programming for the DICOM Bridge is dependent on the type of printer-receiving station. The printer-receiving stations that have been released for use are listed in the SIEMENS Intranet. Please use the corresponding documents for start-up.

DICOM Conformance statements for DICOM Bridge

The DICOM Conformance statement should be made available to the customer or customer’s system administrator or network administrator. The conformance statement is located on the Siemens Intranet.

Operating system

Microsoft WINDOWS NT 4.0 is the operating system used for the DICOM Bridge.

- The data listed in the tables in this chapter must be obtained from the system administrator.

NOTE	**Abbreviations used in this chapter:** - Ref to MA = refer to installation instructions

Receiving stations or printer-receiving stations

	Manufacturer:	**Copy of the DICOM Conformance Statement on hand?**
1st receiving station		
2nd receiving station		
3rd receiving station		
Worklist Station		
Printer-receiving station		

Computer network cabling

Cable type and cable length

Prerequisite for the DICOM Bridge is a TCP/IP connection (TP, AUI or BNC) to the customer-internal computer network. The connection cables are not included in the delivery volume. The connection for the DICOM Bridge is located on the back panel of the system monitor trolley. The computer network cable should be of adequate length so as not to restrict the movement/placement of the monitor trolley in the room. (The length of the system power connection cable can be used as a guide = approx. 7 meters).

The data transfer rate is fix 10 MBit/s.
A data transfer rate of 100 MBit/s can't be programmed.

Cable routing should be set up on-site; the correct network connections should be installed.

Cable type used:	**Check where applicable**
Twisted pair	
AUI	
BNC	

Required cable lengths:	

Configuration data for network connection

Computer identification:

What	Determination of system administrator	Comments	Ref to MA
Computer name for DICOM Bridge		Please indicate full name	[1]
Member of a Workgroup?		(excludes membership in a domain	[2]
Workgroup name		Please indicate full name	[3]
Member of a WIN NT domain?		(excludes membership in a Workgroup)	[4]
Domain name		Please indicate full name	[5]
DICOM Bridge IP address		Please indicate in the format "000.000.000.000"	[6]
Other DICOM Bridge IP-addresses		Only if needed. Please indicate using the "000.000.000.000" format	[6]
Other DICOM Bridge IP-addresses		Only if needed. Please indicate using the "000.000.000.000" format	[6]
Subnet mask(s) DICOM Bridge		Please indicate using the "000.000.000.000" format	[7]

Gateways

What	Determination of system administrator	Comments	Ref. to MA
IP-address Default Gateway		If Default Gateway is present, please indicate in the format "000.000.000.000"	[8]
Other Gateways?		Please indicate "Yes" or "No"	
IP-address 2nd Gateway		Indicate in the format "000.000.000.000" only if other Gateways are present	[9]
IP-address 3rd Gateway		Indicate in the format "000.000.000.000" only if other Gateways are present	[9]
IP-address 4th Gateway		Indicate in the format "000.000.000.000" only if other Gateways are present	[9]

Domain Name Service (DNS)

What	Determination of system administrator	Comments	Ref. to MA
Is Domain name Service (DNS) used?		Please indicate "Yes" or "No"	
DNS Host name DICOM Bridge		Usually the same as the computer name (refer to line 1 of this table) Please indicate full name	[10]
DNS domain of the DICOM Bridge		Usually the same as the domain name Please indicate full name	[11]
1. DNS IP-address		If DNS is used, indicate using the "000.000.000.000" format	[12]
2. DNS IP-address		If DNS is used, indicate using the "000.000.000.000" format	[12]
3. DNS IP-address		If DNS is used, indicate using the "000.000.000.000" format	[12]

Domain Suffix Search Order, - 1st entry		Only if DNS suffix search order is used	[13]
- 2nd entry		Only if DNS suffix search order is used	[13]
- 3rd entry		Only if DNS suffix search order is used	[13]

WINS Addressing

What	Determination of system administrator	Comments	Ref. to MA
Primary WINS Server		(if applicable)	[14]
Secondary WINS Server		(if applicable)	[15]
Will the DNS be used for WINS?		(If DNS and WINS apply)	[16]
Will LMHOSTS be used as the name?		Please answer "Yes" or "No"	[17]
Does the LMHOSTS file have to be imported?		Has to be performed by the system administrator during the installation (access authorization)	[18]

Routing

What	Determination of system administrator	Comments	Ref. to MA
Is IP-Forwarding (IP-Routing) used?		Please answer "Yes" or "No"	[19]

Configuration of the DICOM Bridge and DICOM receiving stations connected

- The following information should be provided by the system administrator (Systemadmin.):

DICOM Bridge

What	Determination of the system administrator	Comments	Ref. to MA
APPLICATION_ ENTITY_TITLE of DICOM Bridge		Name of DICOM Bridge in the network	[20]
MANUFACTURER _MODEL_NAME		Default: Siremobil Another name can be used at the customer's request	[20A]

Receiving station 1

What	Determination of the System administrator	Comments	Ref. to MA
Name of 1st receiving station, displayed on the System Monitor		Maximum length: 20 characters Valid characters: A..Z; a..z; 0..9; _ The name can be freely assigned, it is not used for identification purposes in the network.	[21]
AE_TITLE (Application entity title of the 1st receiving station with the DICOM "SEND" function)		User program name of the receiving station (DICOM Name)	[22]
Host name of the 1st receiving station		Host name of the 1st receiving station	[23]
IP-address of the 1st receiving station		IP-address of the 1st receiving station. Please indicate using the "000.000.000.000" format	[24]
Port No. of the network connection		Default = 104	[25]

Receiving station 2

What	Determination of System administrator	Comments	Ref. to MA
Name of 2nd receiving station, displayed on the System monitor		Maximum length: 20 characters Valid characters: A..Z; a..z; 0..9; _ The name can be freely assigned; it is not used for identification purposes in the network	[26]
AE_TITLE (Application entity title of the 2nd receiving station with the DICOM "SEND" function		User program - name of the receiving station (DICOM Name)	[27]
Host name of the 2nd receiving station		Host name of the 2nd receiving station	[28]
IP-address of the 2nd receiving station		IP-address of the 2nd receiving station; please indicate using the "000.000.000.000" format	[29]
Port number of the network connection		Default = 104	[30]

Receiving station 3

What	Determination of System administrator	Comments	Ref. to MA
Name of 3rd receiving station, displayed on the System monitor		Maximum length: 20 characters Valid characters: A..Z; a..z; 0..9; _ The name can be freely assigned; it is not used for identification purposes in the network	[26]
AE_TITLE (Application entity title of the 3rd receiving station with the DICOM "SEND" function		User program - name of the receiving station (DICOM Name)	[27]
Host name of the 3rd receiving station		Host name of the 3rd receiving station	[28]
IP-address of the 3rd receiving station		IP-address of the 3rd receiving station; please indicate using the "000.000.000.000" format	[29]
Port number of the network connection		Default = 104	[30]

Printer-receiving station

Some information may be taken from the DICOM Conformance Statement for the printer-receiving station.

What	Determination of the System administrator	Comments	Ref. to MA
Name of the printer-receiving station, displayed on the System monitor		Maximum length: 20 characters Valid characters: A..Z; a..z; 0..9; _ The name can be freely assigned; it is not used for identification purposes in the network	[40]
AE_TITLE (Application entity title of the receiving station with the DICOM "BasicPRINT" function		User program name of the receiving station	[41]
Host name of the printer-receiving station		Host name of the printer-receiving station	[42]
IP-address of the printer-receiving station		IP-address of the printer-receiving station; please indicate using the "000.000.000.000" format	[43]
Port number of the network connection		Default = 104	[44]
Which printer media is being used? Blue film, Clear film, paper		Default = Blue Film	[45]
Format used for the printer media		Default = 8 Inch x 10 Inch	[46]

What	Determination of the System administrator	Comments	Ref. to MA
Image display desired? Normal/ Reverse		Default = Normal: Normal = image display on the printed copy as on the monitor (bone is dark) Reverse = image display as on X-ray film (bone is light)	[47]
Desired image orientation on the printed media? Portrait (short side at the top) Landscape (long side at the top)		Default = Landscape	[48]
Process for adjusting the format of the image being transferred to the correct image size (Film format and Film segmentation)		Default = CUBIC Processes possible: REPLICATE = Pixel repetition (good IQ, fastest image processing) BILINEAR = Pixel calculation (line) (very good IQ, very fast image processing.) CUBIC = Pixel calculation (area) (excellent IQ, fast image processing)	[49]

Worklist Station

What	Determination of the System administrator	Comments	Ref. to MA
Name of the Worklist Station		Maximum length: 20 characters Valid characters: A..Z; a..z; 0..9; _ The name can be freely assigned. It is not used for identification in the computer network	[51]
AE_TITLE (Application entity title of the Worklist Station with the DICOM function "Get Worklist")		User program name of the Worklist Station (DICOM name)	[52]
Host name of the Worklist Station		Host names of the Worklist Station	[53]
IP address of the Worklist Station		Please indicate IP address of the Worklist Station using the "000.000.000.000" format	[54]
Port number of the network connection		Default = 104	[55]

This page intentionally left blank.

Chap. 0	Cover page, revision level, table of contents revised
Chap. 1	POWERMOBIL / ARCOSKOP Worklist functionality added
Chap. 2	POWERMOBIL / ARCOSKOP Worklist functionality added

This page intentionally left blank.